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TITLE: Method for manufacturing capacitor using atomic layer deposition

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PATENT-ASSIGNEE: HYNIX SEMICONDUCTOR INC[HYNIN]

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PATENT-FAMILY:

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APPLICATION-DATA:

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ABSTRACTED-PUB-NO: KR2002046433A

BASIC-ABSTRACT:

NOVELTY - A fabrication method of a capacitor is provided to improve quality and electrical properties by using an ALD(Atomic Layer Deposition) and an ammonia plasma treatment.

DETAILED DESCRIPTION - A lower electrode(21) and a barrier metal(22) are sequentially formed on a semiconductor substrate(20). A TaON dielectric film(23) is then formed on the barrier metal. A TiN upper electrode(24) is formed on the TaON dielectric film(23) by an ALD using TiCl4 as a source gas. The surface of the TaN upper electrode(24) is performed by NH3 plasma treatment so as to remove Cl radicals.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: METHOD MANUFACTURE CAPACITOR ATOMIC LAYER DEPOSIT

DERWENT-CLASS: L03 U11 U14

CPI-CODES: L03-G04A; L04-C11C2; L04-C12B; L04-C14A;

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